

Chart4

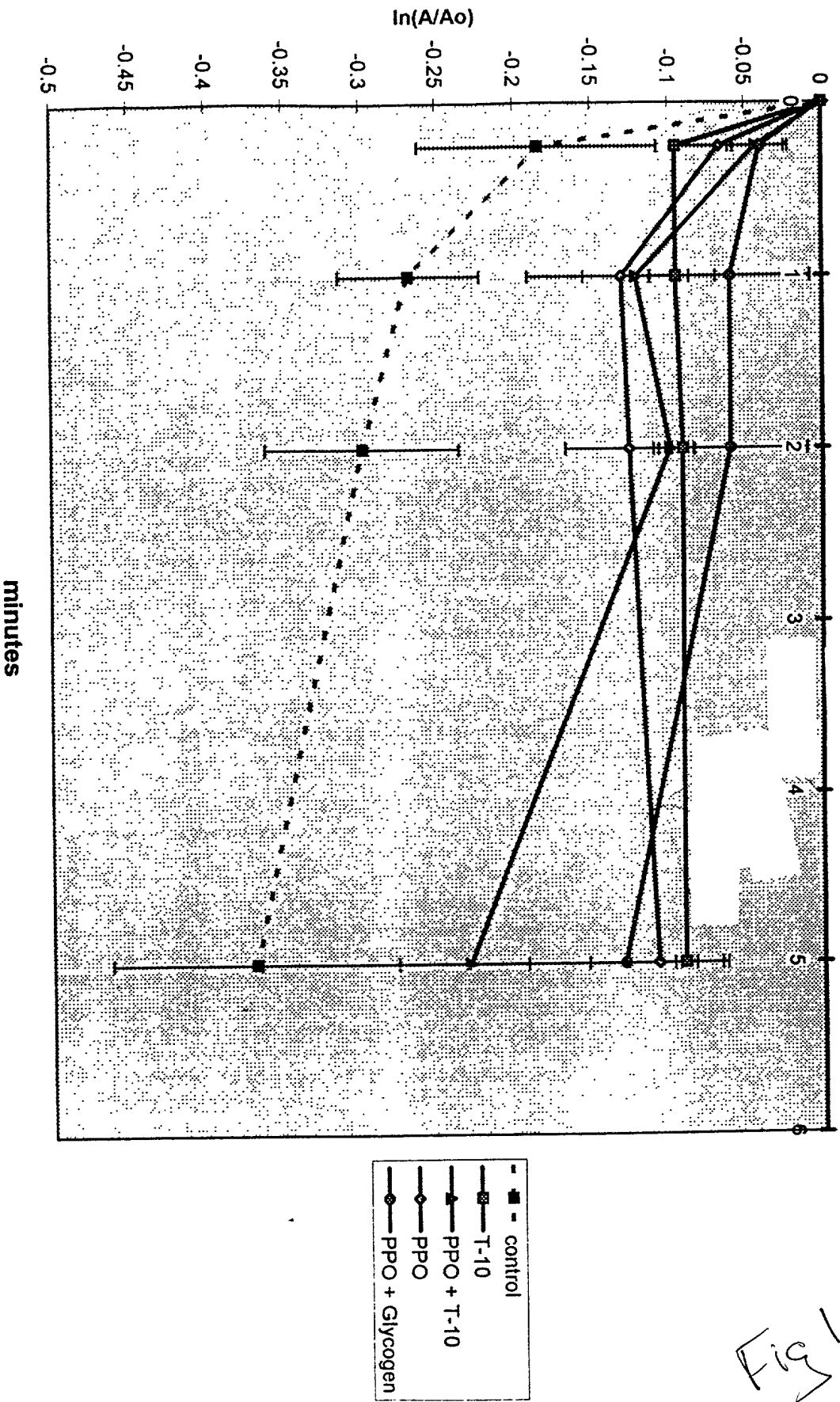


Chart5

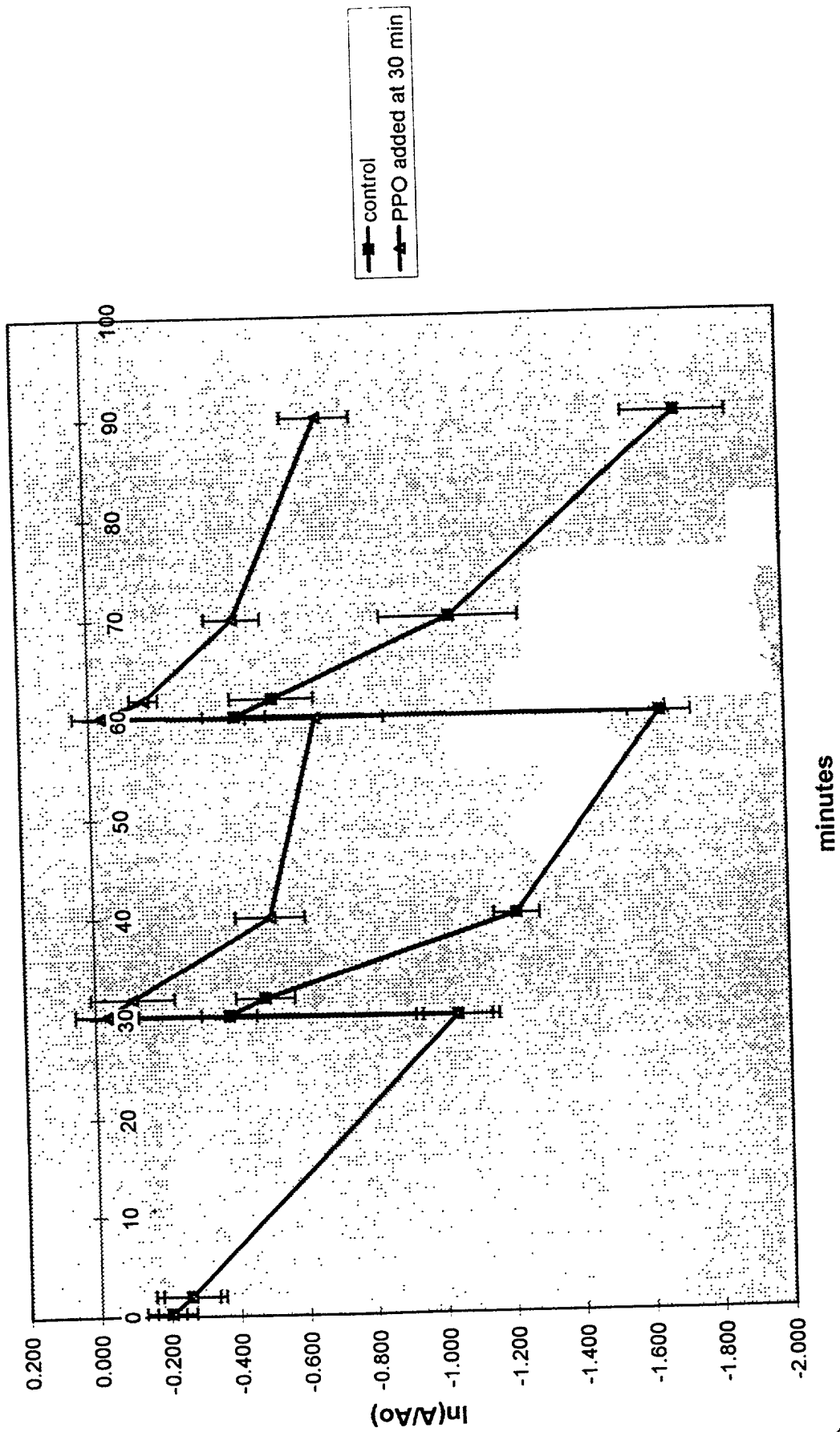


Fig 2

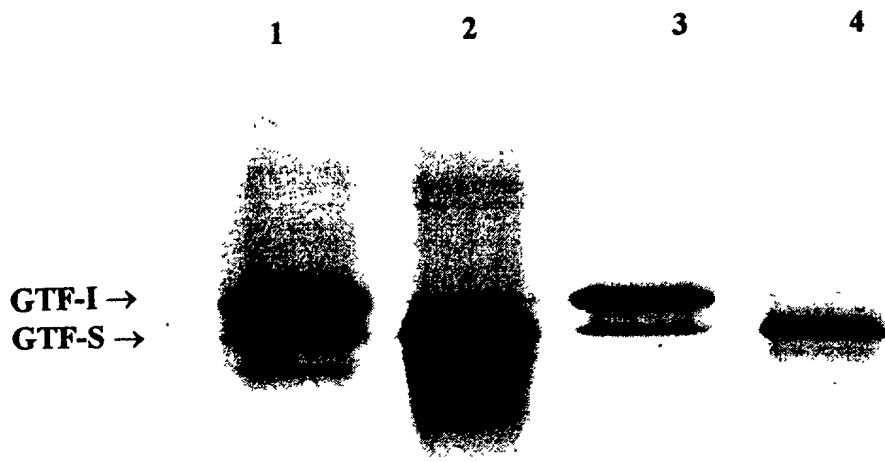
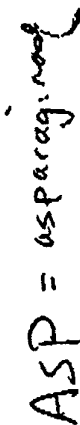


Fig 3

### Adhesion of *E. coli* Type 1 to Uroepithelial Cells (FC)



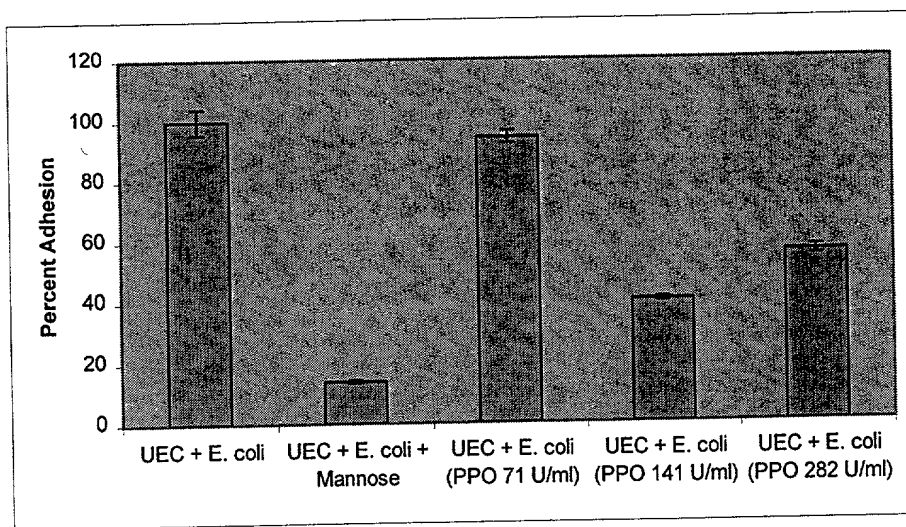


Figure 5. Effect of polyphenol oxidase treatment on type 1 fimbriated *E. coli*. Bacteria were treated with increasing concentrations of polyphenol oxidase (71, 141, or 282 u/ml) then incubated with UECs to allow for adhesion. Degree of adhesion is represented as a percentage based on the adhesion of untreated bacteria to UECs, which was set at 100%.

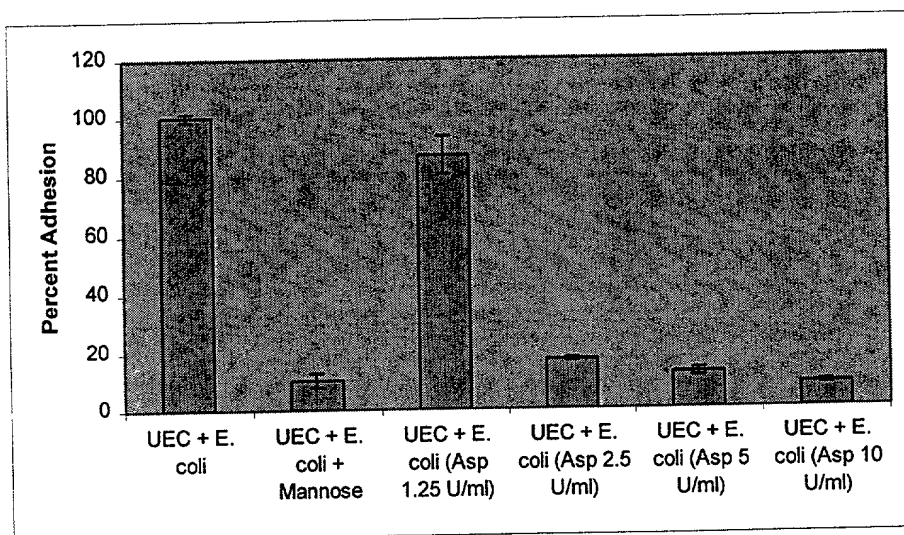


Figure 6. Effect of asparaginase treatment on type 1 fimbriated *E. coli*. Bacteria were treated with increasing concentrations of asparaginase (1.25, 2.5, 5, or 10 u/ml) then incubated with UECs to allow for adhesion. Degree of adhesion is represented as a percentage based on the adhesion of untreated bacteria to UECs, which was set at 100%.

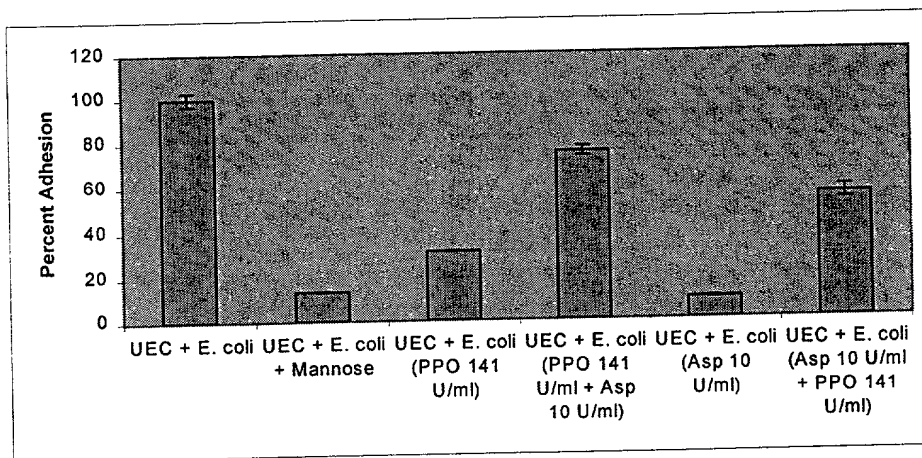


Figure 7. Effect of sequential enzymatic treatments on the adhesion of type 1 fimbriated *E. coli* to UECs. Bacteria were treated with polyphenol oxidase (141 u/ml) followed by treatment with asparaginase (10 u/ml) or vice versa then incubated with UECs. Degree of adhesion is represented as a percentage based on the adhesion of untreated bacteria to UECs, which was set at 100%.

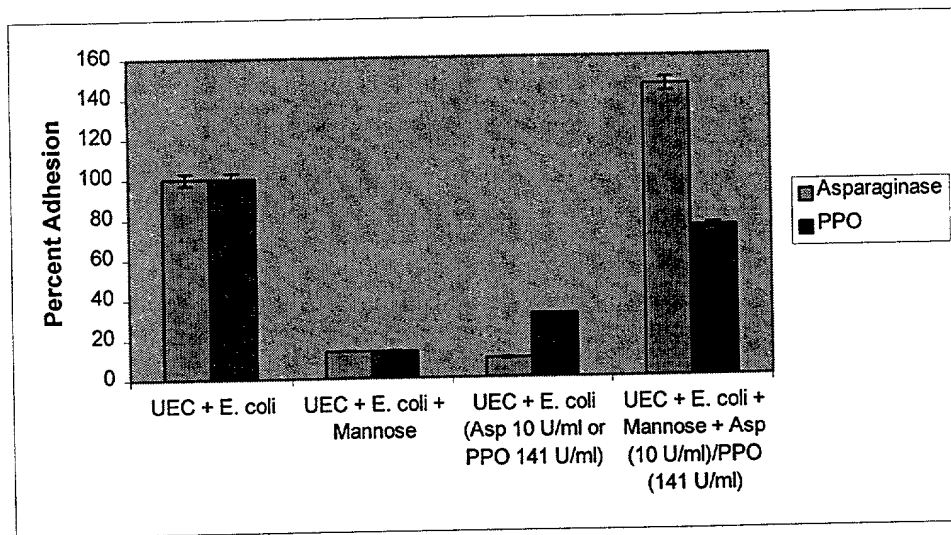


Figure 8. The effect of polyphenol oxidase and asparaginase on the Fim H binding site after being competitively blocked with mannose. Mannose (50 mM) was used to completely block the binding site. Degree of adhesion is represented as a percentage based on the adhesion of untreated bacteria to UECs, which was set at 100%.



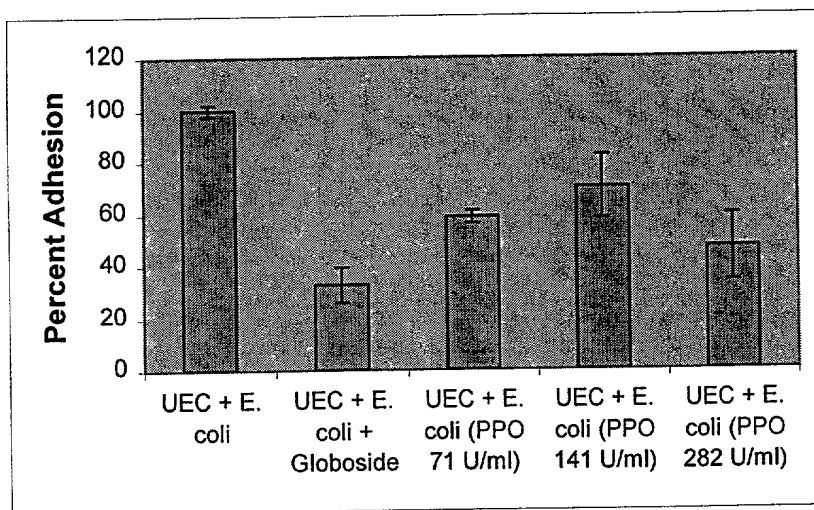


Figure 9. Effect of polyphenol oxidase treatment on P fimbriated *E. coli*. Bacteria were treated with increasing concentrations of polyphenol oxidase (71, 141, or 282 u/ml) then incubated with UECs to allow for adhesion. Degree of adhesion is represented as a percentage based on the adhesion of untreated bacteria to UECs, which was set at 100%.

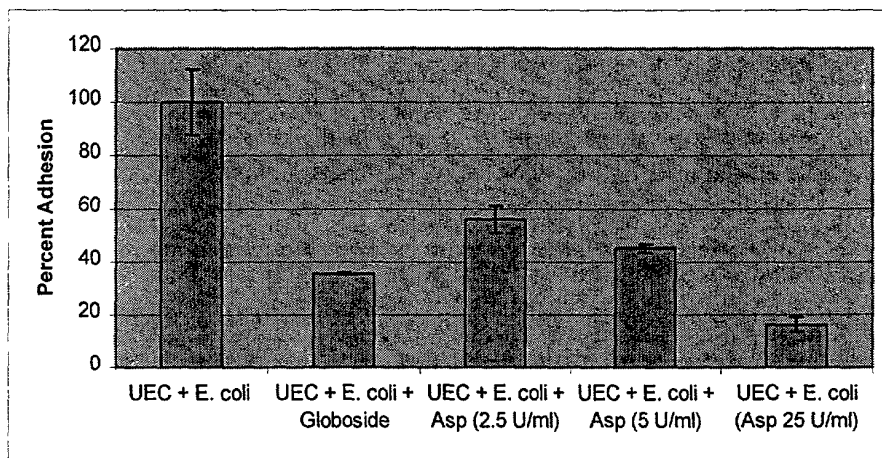


Figure 10. Effect of asparaginase treatment on P fimbriated *E. coli*. Bacteria were treated with increasing concentrations of asparaginase (2.5, 5, or 25 u/ml) then incubated with UECs to allow for adhesion. Degree of adhesion is represented as a percentage based on the adhesion of untreated bacteria to UECs, which was set at 100%.

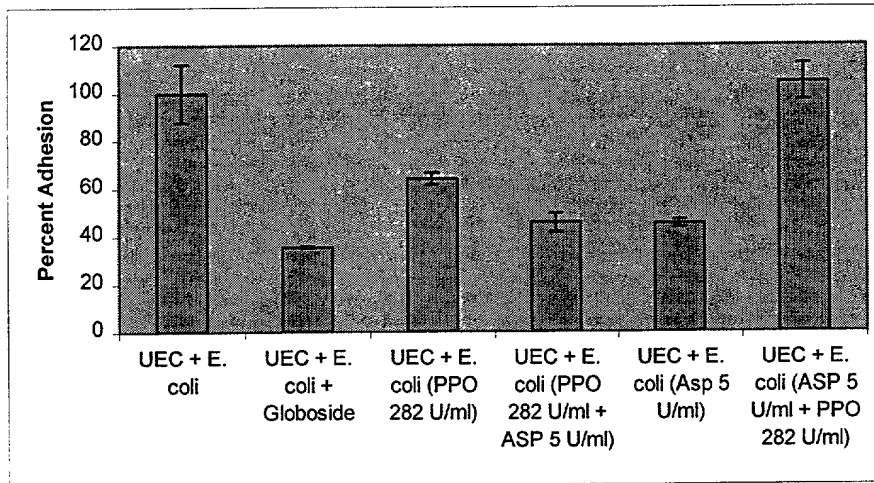


Figure 11. Effect of sequential enzymatic treatments on the adhesion of P fimbriated *E. coli* to UECs. Bacteria were treated with polyphenol oxidase (141 u/ml) followed by treatment with asparaginase (10 u/ml) or vice versa then incubated with UECs. Degree of adhesion is represented as a percentage based on the adhesion of untreated bacteria to UECs, which was set at 100%.

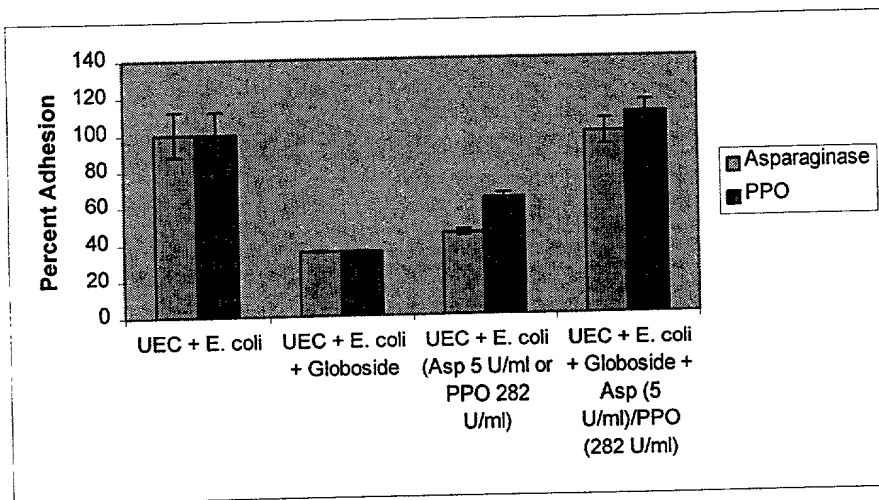


Figure 12. The effect of polyphenol oxidase and asparaginase on the Pap G binding site after being competitively blocked with globoside. Globoside was used to completely block the binding site. Degree of adhesion is represented as a percentage based on the adhesion of untreated bacteria to UECs, which was set at 100%.

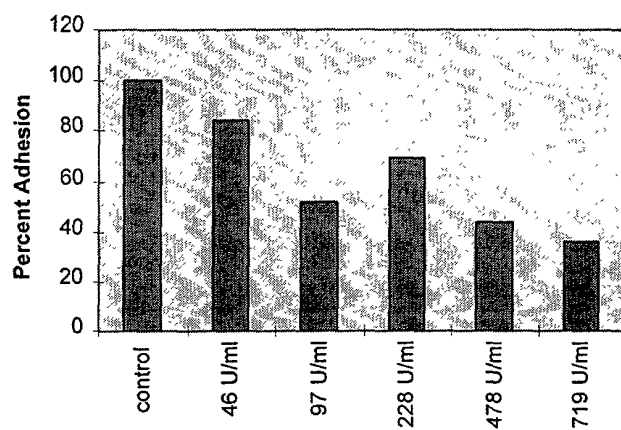


Figure 13. Effect of polyphenol oxidase on adhesion of *S. pyogenes* to buccal epithelial cells. Degree of adhesion is represented as a percentage based on the adhesion of untreated bacteria to UECs, which was set at 100%.